

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,956,238 B2
DATED : October 18, 2005
INVENTOR(S) : Ryu et al.

Page 1 of 3

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Title page.

Item [60], **Related U.S. Application Data**, add -- Application No. 09/834,283, filed on Apr. 12, 2001, now Pat. No. 6,610,366. --.

Item [56], **References Cited**, U.S. PATENT DOCUMENTS, add the following:

-- 6,767,843	07/2004	Lipkin et al.	438/758
6,759,684	07/2004	Fukuda et al.	257/77
6,653,659	11/2003	Ryu et al.	257/77
6,551,865	04/2003	Kumar et al.	438/137
6,429,041	08/2002	Ryu et al.	438/105
6,303,508	10/2001	Alok	438/705
6,297,100	10/2001	Kumar et al.	438/268
6,180,958	01/2001	Cooper, Jr.	257/77
6,133,587	10/2000	Takeuchi et al.	257/77
6,025,233	02/2000	Teresawa	438/270
6,020,600	02/2000	Miyajima et al.	257/76
5,976,936	11/1999	Miyajima et al.	438/268
5,917,203	06/1999	Bhatnagar et al.	257/139
5,877,041	03/1999	Fuller	438/105
5,851,908	12/1998	Harris et al.	438/520
5,837,572	11/1998	Gardner et al.	438/199
5,814,859	09/1998	Ghezze et al.	257/335
5,804,483	09/1998	Harris	438/268
5,734,180	03/1998	Malhi	257/77
5,710,059	01/1998	Rottner	437/151
5,629,531	05/1997	Palmour	257/77
5,510,281	04/1996	Ghezze et al.	437/41
5,396,085	03/1995	Baliga	257/77
5,393,999	02/1995	Malhi	257/289
5,385,855	01/1995	Brown et al.	437/41
5,384,270	01/1995	Ueno	437/40
5,348,895	09/1994	Smayling et al.	437/54
5,270,554	12/1993	Palmour	257/77
5,111,253	05/1992	Korman et al.	257/341
4,811,065	03/1989	Cogan	257/328
3,629,011	12/1971	Tohi et al.	148/1.5
2004/0212011	10/2004	Ryu	257/335
2004/0211980 A1	10/2004	Ryu	257/200
2002/0030191	03/2002	Das et al.	257/77
2002/0047125 A1	04/2002	Fukuda et al.	257/77
2002/0102358	08/2002	Das et al.	472/377 --.

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,956,238 B2
DATED : October 18, 2005
INVENTOR(S) : Ryu et al.

Page 2 of 3

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Title page (cont'd).

FOREIGN PATENT DOCUMENTS, add the following:

DE	19832329 A1	02/1998	
EP	1 204 145 A2	08/2002	
EP	1 058 317 A2	12/2000	
JP	01117363	05/1989	Abstract
JP	03034466	02/1991	Abstract
WO	97/98754	03/1997	
WO	98/02916	01/1998	
WO	01/78134 A1	10/2001	

Under OTHER PUBLICATIONS

Baliga, Power Semiconductor Devices, Chapter 7, PWS Publishing, 1998
Bhatnagar et al. "Comparison of 6H-SiC, 3C-SiC, and Si for Power Devices," *IEEE Transactions on Electron Devices*, Vol. 40, No. 3, March 1993, pp. 645-55.
Chung et al., "The Effect of Si:C Source Ratio on SiO₂/SiC Interface State Density for Nitrogen Doped 4H and 6H-SiC," *Materials Science Forum*. (2000) Vols. 338-342, pp. 1097-1100.
Dahlquist et al. "A 2.8kV, Forward Drop JBS Diode with Low Leakage," *Materials Science Forum*, Vols. 338-342, (2000) pp. 1179-82.
Mondal et al. "An Integrated 500-V Power DSMOSFET/Antiparallel Rectifier Device with Improved Diode Reverse Recovery Characteristics," *IEEE Electron Device Letters*, Vol. 23, No. 9, September 2002, pp. 562-4.
Motorola Power MOSFET Transistor Databook, 4th edition. Motorola, Inc., 1989, pp. 2-5-4 - 2-5-7.
Palmour et al. "SiC Device Technology: Remaining Issues," *Diamond and Related Materials*. vol. 6, 1997, pp. 1400-1404.
Rao et al. "P-N Junction Formation in 6H-SiC by Acceptor Implantation into N-Type Substrate," *Nuclear Instruments and Methods in Physics Research B*. vol. 106, 1995, pp. 333-338.
Rao et al. "Al and N Ion Implantations in 6H-SiC," *Silicon Carbide and Related Materials*. 1995 Conf, Kyoto, Japan. Published 1996.
Capano, M.A., et al., Ionization Energies and Electron Mobilities in Phosphorus- and Nitrogen-Implanted 4H-Silicon Carbide, IEEE ICSCRM Conference 1999, Research Triangle Park, North Carolina (Oct. 10-13, 1999).
Patel, R., et al., Phosphorus-Implanted High-Voltage N.sup.+ P 4H-SiC Junction Rectifiers, Proceedings of 1998 International Symposium on Power Semiconductor Devices & ICs, pp. 387-390 (Kyoto).
Dastidar, Sujoyita, A Study of P-Type Activation in Silicon Carbide, Thesis (Purdue University, May 1998).

OTHER PUBLICATIONS,

"Lai et al.", reference, should read -- "Interface Properties of N₂O-Annealed --.

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,956,238 B2
DATED : October 18, 2005
INVENTOR(S) : Ryu et al.

Page 3 of 3


It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 24,

Line 15, should read -- interface state density of less than $10^{12} \text{eV}^{-1} \text{cm}^{-2}$ for --.

Signed and Sealed this

Eighth Day of August, 2006

A handwritten signature in black ink, appearing to read "Jon W. Dudas". The signature is stylized with a large, looped initial "J" and a cursive "Dudas".

JON W. DUDAS
Director of the United States Patent and Trademark Office